

MEBT development in Q3/4 FY13 (1)



- Bunching cavities: a prototype is in bidding process
 - no choice has been made yet
- Quadrupoles: development in BARC, India
 - Finalizing drawings of a quadrupole triplet assembly
 - Dipole prototype has been manufactured and successfully tested
 - In parallel, the triplet vacuum chamber with a BPM was designed at FNAL
 - The triplet will be assembled with a chamber mockup
 - Threaded studs instead of SMA connectors and BPM plates
 - Production drawings of a mockup are being finalized

Absorber

- The prototype was tested to full power density (absorbed power ~2.3kW)
 - Postponed power cycling tests because a failure would be fatal for the test bench
- A concept of a second prototype is in works
 - More robust design; simpler manufacturing; management of secondary particles

Scrapers

Estimations for a radiation – cooled TZM plate and tests with e-beam



Recent MEBT development (2)



50- Ohm kicker

- Parts are expected to come in August, and then assembling will start
- All cables were bent; samples were tested for baking and trimming

200- Ohm kicker

- Conceptual design is done
 - Will use AIN ceramic and vacuum-compatible epoxy
- Drawings are being finalized for a full-scale helix prototype
 - Includes a feedtrough and transmission lines

200- Ohm kicker driver

- Preparing for power tests of 100 V version
- Assembling boards for a higher voltage driver

BPMs

- Several meetings about specs; seemed to agree on parameters
 - Waiting for specification draft from Instrumentation
- Were not able to order buttons for BPM prototype